No. 9300066

# THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

## Pioneer Hi-Bred International, Inc.

Whereas, THERE HAS BEEN PRESENTED TO THE

## Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED DISTINCT VARIETY OF SEXUALLY REPRODUCED, OR TUBER PROPAGATED, PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF TWENTY YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR IMPORTING IT, OR EXPORTING IT, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE ABOVE PURPOSES, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

*SOYBEAN*

*'9584'*

*In Testimony Whereof, I have hereunto set my hand and caused the seal of the Plant Variety Protection Office to be affixed at the City of Washington, D.C. this thirtieth day of April in the year of our Lord one thousand nine hundred and ninety-eight.*

*Attest:*

*Thomas A. Salt*
*Acting Commissioner*
*Plant Variety Protection Office*
*Agricultural Marketing Service*

*Dan Glickman*
*Secretary of Agriculture*

FORM APPROVED: OMB 0581-0055, Expires 1/31/93

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE

# APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

*(Instructions on reverse)*

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

1. NAME OF APPLICANT(S) *(as it is to appear on the Certificate)*
Pioneer Hi-Bred International, Inc.

2. TEMPORARY DESIGNATION OR EXPERIMENTAL NO.

3. VARIETY NAME
9584

4. ADDRESS *(street and no. or R.F.D. no., city, state, and ZIP)*
700 Capital Square
400 Locust Street
Des Moines, IA 50309

5. PHONE *(Include area code)*
515-270-3582

FOR OFFICIAL USE ONLY

PVPO NUMBER
9300066

FILING
Date: Jan. 6, 1993
Time: 9:25 ☑ A.M. ☐ P.M.

FEES RECEIVED
Filing and Examination Fee: $ 2150.00
Date: Dec. 29, 1992
Certificate Fee: $ 300.00
Date: 4-7-93

6. GENUS AND SPECIES NAME
Glycine max

7. FAMILY NAME *(Botanical)*
Leguminosae

8. CROP KIND NAME *(Common Name)*
Soybean

9. DATE OF DETERMINATION
October 1986

10. IF THE APPLICANT NAMED IS NOT A "PERSON," GIVE FORM OF ORGANIZATION *(Corporation, partnership, association, etc.)*
Corporation

11. IF INCORPORATED, GIVE STATE OF INCORPORATION
Iowa

12. DATE OF INCORPORATION
1926

13. NAME AND ADDRESS OF APPLICANT REPRESENTATIVE(S), IF ANY, TO SERVE IN THIS APPLICATION AND RECEIVE ALL PAPERS
John Grace
7301 NW 62nd Ave., P.O. Box 85
Johnston, IA 50131-0085

Mike Roth (copy)
700 Capital Square, 400 Locust Street
Des Moines, IA 50309

PHONE *(Include area code)*:

14. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED *(Follow INSTRUCTIONS on reverse)*

a. ☒ Exhibit A, Origin and Breeding History of the Variety.
b. ☒ Exhibit B, Novelty Statement.
c. ☒ Exhibit C, Objective Description of Variety.
d. ☐ Exhibit D, Additional Description of Variety.
e. ☒ Exhibit E, Statement of the Basis of Applicant's Ownership.
f. ☒ Seed Sample (2,500 viable untreated seeds). Date Seed Sample mailed to Plant Variety Protection Office 12/28/92.
g. ☒ Filing and Examination Fee ($2,150) made payable to "Treasurer of the United States."

15. DOES THE APPLICANT(S) SPECIFY THAT SEED OF THIS VARIETY BE SOLD BY VARIETY NAME ONLY AS A CLASS OF CERTIFIED SEED? *(See section 83(a) of the Plant Variety Protection Act.)*
☐ YES *(If "YES," answer items 16 and 17 below)* ☒ NO *(If "NO," skip to item 18 below)*

16. DOES THE APPLICANT(S) SPECIFY THAT THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS?
☐ YES ☐ NO

17. IF "YES" TO ITEM 16, WHICH CLASSES OF PRODUCTION BEYOND BREEDER SEED?
☐ FOUNDATION ☐ REGISTERED ☐ CERTIFIED

18. DID THE APPLICANT(S) PREVIOUSLY FILE FOR PROTECTION OF THE VARIETY IN THE U.S.?
☐ YES *(If "YES," through* ☐ Plant Variety Protection Act ☐ Patent Act. Give date: _____.)
☒ NO

19. HAS THE VARIETY BEEN RELEASED, USED, OFFERED FOR SALE, OR MARKETED IN THE U.S. OR OTHER COUNTRIES?
☐ YES (If "YES," give names of countries and dates)
☒ NO

20. The applicant(s) declare(s) that a viable sample of basic seeds of this variety will be furnished with the application and will be replenished upon request in accordance with such regulations as may be applicable.

The undersigned applicant(s) is (are) the owner(s) of this sexually reproduced novel plant variety, and believe(s) that the variety is distinct, uniform, and stable as required in section 41, and is entitled to protection under the provisions of section 42 of the Plant Variety Protection Act.

Applicant(s) is (are) informed that false representation herein can jeopardize protection and result in penalties.

| SIGNATURE OF APPLICANT *(Owner(s))* | CAPACITY OR TITLE | DATE |
|---|---|---|
| John Grace | Soybean Research Mgr. | 12/21/92 |
| SIGNATURE OF APPLICANT *(Owner(s))* | CAPACITY OR TITLE | DATE |
| | | |

Pioneer Hi-Bred International, Inc.
PVP Application Variety 9584 Soybean
April 1992

EXHIBIT A

Origin and Breeding History of Variety 9584

| | |
|---|---|
| Summer 1983 | Original cross made at Greenville, MS. Cross number was 2768. Parentage - 217757 * Pioneer Variety 9561 2177 = 5482 * Centennial |
| Winter 1983-84 | F1 plants grown in Hawaii under artificial light. |
| Summer 1984 | F2 advanced to F3 by modified single seed descent at Greenville, MS. |
| Winter 1984-85 | F3 advanced to F5 in Hawaii in two-generation advance by modified single seed descent. |
| Summer 1985 | F5 bulk of 2768 grown in Greenville, MS and 140 plants selected. |
| Summer 1986 | F6 progeny rows of 2768 grown in Greenville, MS. Row G6-10123 selected and composited. |
| Summer 1987 | Yield tested G6-10123 as 2768-04 in 3 reps as entry 10 in test GRD514. |
| Summer 1988 | Yield tested 2768-04 in four locations in the South as entry 24 in test GRA5B4. Plants were grown and harvested as individual plants to start strain purification. |
| Summer 1989 | Yield tested as W2768-04 in 18 locations in the Mid-South, the South, and the Southeast. One hundred progeny rows were grown and 59 rows were bulked as breeders seed. |

| | |
|---|---|
| Summer 1990 | Yield tested as Y2768-04 in 17 locations in the Mid-South, the South, and the Southeast. Approximately 4 acre increase of breeders seed was grown at Greenville, MS |
| Summer 1991 | Yield tested as XB58E in 17 locations in the Mid-South, the South, and the Southeast. Approximately 60 acres of parent seed (foundation equivalent) were grown near Corning, AR. |
| December 1991 | XB58E nominated for release and full production and assigned the designation 9584. |
| | Yield trials and seed production in 1991 indicate Variety 9584 is uniform and stable. As with other soybean varieties, variants can occur for almost any character during the course of repeated sexual production. |

Pioneer Hi-Bred International, Inc.
PVP Application Variety 9584 Soybean
April 1992

EXHIBIT B

Variety 9584 is most similar to varieties 9592, 9593, 9581, 9582, FFR 565, FFR 595, H5164, H6200 and Walters. However, 9584 differs from 9581, 9582, FFR 565, FFR 595 and H5164 in resistance to soybean cyst nematode race 4; 9584 is susceptible while 9581, 9582, FFR 565, FFR 595 and H5164 are resistant. 9592 is susceptible to soybean cyst nematode race 3, whereas 9584 is resistant. 9584 is susceptible to phytophthora root rot while H6200 is resistant. In height comparison, 9593 is 4.6 inches taller than Variety 9584 (Table 1) and Walters is 3.8 inches shorter than Variety 9584 (Table 2).

Table 1. Variety '9584' vs '9593' for height.

All observations are from research plots planted using a randomized complete block design. Planted plot length was 21 feet, trimmed to 15 feet. Plot width was 4 30 inch rows, or 10 feet. Height was measured in inches from the soil surface to the top pod. Data was taken in the years indicated.

1989

| REP | 9584 X1 | 9593 X2 | X1-X2 | (X1-X2)**2 |
|---|---|---|---|---|
| 1 | 25 | 36.5 | -11.5 | 132.25 |
| 2 | 13 | 22 | -9 | 81 |
| 3 | 33 | 39.3 | -6.3 | 39.69 |
| 4 | 21 | 26 | -5 | 25 |
| 5 | 30 | 36.5 | -6.5 | 42.25 |
| 6 | 22 | 28.7 | -6.7 | 44.89 |
| 7 | 19.3 | 24 | -4.7 | 22.09 |
| sum | 163.3 | 213 | -49.7 | 387.17 |
| ave | 23.33 | 30.43 | -7.1 | |

SD**2= (387.17 - (-49.7**2)/7) / (7*6)
SD**2= 0.81667
SD= 0.9037
t = -7.1/0.9037
t = -7.8566 ** significant .1% level
DF= 6

n groups of individuals = 7

ave height of 9584 = 23.3 inches
ave height of 9593 = 30.4 inches

1990

| REP | 9584 X1 | 9593 X2 | X1-X2 | (X1-X2)**2 |
|---|---|---|---|---|
| 1 | 24.7 | 27.3 | -2.6 | 6.76 |
| 2 | 31.5 | 36 | -4.5 | 20.25 |
| 3 | 32 | 41 | -9 | 81 |
| 4 | 32 | 37 | -5 | 25 |
| 5 | 32 | 36.5 | -4.5 | 20.25 |
| sum | 152.2 | 177.8 | -25.6 | 153.26 |
| ave | 30.44 | 35.56 | -5.12 | |

SD**2= (153.26 - (-25.6**2)/5) / (5*4)
SD**2= 1.1094
SD= 1.05328
t = -5.12/1.05328
t = -4.861 * significant 5% level
DF= 4

n groups of individuals = 5

ave height of 9584 = 30.4 inches
ave height of 9593 = 35.5 inches

1991

| REP | 9584 X1 | 9593 X2 | X1-X2 | (X1-X2)**2 |
|---|---|---|---|---|
| 1 | 42 | 46 | -4 | 16 |
| 2 | 32.3 | 35.3 | -3 | 9 |
| 3 | 27.7 | 33.3 | -5.6 | 31.36 |
| 4 | 31 | 38 | -7 | 49 |
| 5 | 36 | 40 | -4 | 16 |
| 6 | 23 | 27 | -4 | 16 |
| sum | 192 | 219.6 | -27.6 | 137.36 |
| ave | 32 | 36.6 | -4.6 | |

SD**2= (137.36 - (-27.6**2)/6) / (6*5)
SD**2= 0.34667
SD= 0.58878
t = -4.6/0.58878
t = -7.8127 ** significant .1% level
DF= 5

n groups of individuals = 6

ave height of 9584 = 32.0 inches
ave height of 9593 = 36.6 inches

Summary

| REP | 9584 X1 | 9593 X2 | X1-X2 | (X1-X2)**2 |
|---|---|---|---|---|
| sum | 507.5 | 610.4 | -103 | 677.79 |
| ave | 28.19 | 33.91 | -5.72 | |

SD**2= (677.79 - (-103**2)/18) / (18*17)
SD**2= 0.29263
SD= 0.54095
t = -5.72/0.54095
t = -10.568 ** significant .1% level
DF= 17

n groups of individuals = 18

ave height of 9584 = 28.1 inches
ave height of 9593 = 33.9 inches

Table 2. Variety '9584' vs 'Walters' for height.

All observations are from research plots planted in a randomized complete block design. Planted plot length was 21 feet, trimmed to 15 feet. Plot width was 4 30 inch rows, or 10 feet. Height was measured in inches from the soil surface to the top pod. Data was taken in the years indicated.

1991

| REP | 9584 X1 | Walters X2 | X1-X2 | (X1-X2)**2 |
|---|---|---|---|---|
| 1 | 34 | 31 | 3 | 9 |
| 2 | 32 | 29 | 3 | 9 |
| 3 | 33 | 32 | 1 | 1 |
| 4 | 30 | 27 | 3 | 9 |
| 5 | 26 | 22 | 4 | 16 |
| 6 | 30 | 21 | 9 | 81 |
| sum | 185 | 162 | 23 | 125 |
| ave | 30.83 | 27 | 3.833 | |

SD**2= (125 - (23**2)/6) / (6 * 5)
SD**2= 1.22778
SD= 1.10805
t = 3.833/1.10805
t = 3.45953 * significant 5% level
DF= 5

n groups of individuals = 6

ave height of 9584 = 30.8 inches
ave height of Walters = 27.0 inches

FORM APPROVED: OMB NO. 0581-0056

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
LIVESTOCK, MEAT, GRAIN & SEED DIVISION
PLANT VARIETY PROTECTION OFFICE
BELTSVILLE, MARYLAND 20705

EXHIBIT C
*(Soybean)*

# OBJECTIVE DESCRIPTION OF VARIETY
## *SOYBEAN (Glycine max L.)*

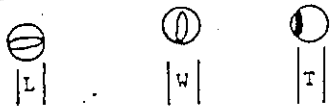
| NAME OF APPLICANT(S) | TEMPORARY DESIGNATION | VARIETY NAME |
|---|---|---|
| Pioneer Hi-Bred International, Inc. | | 9584 |

| ADDRESS *(Street and No., or R.F.D. No., City, State, and Zip Code)* | FOR OFFICIAL USE ONLY |
|---|---|
| 700 Capital Square<br>400 Locust Street<br>Des Moines, IA 50309 | PVPO NUMBER<br>9300066 |

Choose the appropriate response which characterizes the variety in the features described below. When the number of significant digits in your answer is fewer than the number of boxes provided, place a zero in the first box when number is 9 or less (e.g., [0][9]). Starred characters ★ are considered fundamental to an adequate soybean variety description. Other characters should be described when information is available.

**1. SEED SHAPE:**

[2]




1 = Spherical (L/W, L/T, and T/W ratios = < 1.2)
2 = Spherical Flattened (L/W ratio > 1.2; L/T ratio = < 1.2)
3 = Elongate (L/T ratio > 1.2; T/W = < 1.2)
4 = Elongate Flattened (L/T ratio > 1.2; T/W > 1.2)

★ **2. SEED COAT COLOR:** (Mature Seed)

[1] 1 = Yellow 2 = Green 3 = Brown 4 = Black 5 = Other *(Specify)* _____

**3. SEED COAT LUSTER:** (Mature Hand Shelled Seed)

[2] 1 = Dull ('Corsoy 79'; 'Braxton') 2 = Shiny ('Nebsoy'; 'Gasoy 17')

★ **4. SEED SIZE:** (Mature Seed)

[1][5] Grams per 100 seeds

★ **5. HILUM COLOR:** (Mature Seed)

[6] 1 = Buff 2 = Yellow 3 = Brown 4 = Gray 5 = Imperfect Black 6 = Black 7 = Other *(Specify)* _____

★ **6. COTYLEDON COLOR:** (Mature Seed)

[1] 1 = Yellow 2 = Green

★ **7. SEED PROTEIN PEROXIDASE ACTIVITY:**

[2] 1 = Low 2 = High

★ **8. SEED PROTEIN ELECTROPHORETIC BAND:**

[ ] 1 = Type A ($SP1^a$) 2 = Type B ($SP1^b$)

★ **9. HYPOCOTYL COLOR:**

[2] 1 = Green only ('Evans'; 'Davis') 2 = Green with bronze band below cotyledons ('Woodworth'; 'Tracy')
3 = Light Purple below cotyledons ('Beeson'; 'Pickett 71')
4 = Dark Purple extending to unifoliate leaves ('Hodgson'; 'Coker Hampton 266A')

★ **10. LEAFLET SHAPE:**

[3] 1 = Lanceolate 2 = Oval 3 = Ovate 4 = Other *(Specify)* _____



8

**11. LEAFLET SIZE:**

[2] 1 = Small ('Amsoy 71'; 'A5312') 2 = Medium ('Corsoy 79'; 'Gasoy 17') 3 = Large ('Crawford'; 'Tracy')

**12. LEAF COLOR:**

[2] 1 = Light Green ('Weber'; 'York') 2 = Medium Green ('Corsoy 79'; 'Braxton') 3 = Dark Green ('Gnome'; 'Tracy')

★ **13. FLOWER COLOR:**

[1] 1 = White 2 = Purple 3 = White with purple throat

★ **14. POD COLOR:**

[1] 1 = Tan 2 = Brown 3 = Black

★ **15. PLANT PUBESCENCE COLOR:**

[2] 1 = Gray 2 = Brown (Tawny)

**16. PLANT TYPES:**

[2] 1 = Slender ('Essex'; 'Amsoy 71') 2 = Intermediate ('Amcor'; 'Braxton') 3 = Bushy ('Gnome'; 'Govan')

★ **17. PLANT HABIT:**

[1] 1 = Determinate ('Gnome'; 'Braxton') 2 = Semi-Determinate ('Will') 3 = Indeterminate ('Nebsoy'; 'Improved Pelican')

★ **18. MATURITY GROUP:**

[0][8] 1 = 000 2 = 00 3 = 0 4 = I 5 = II 6 = III 7 = IV 8 = V 9 = VI 10 = VII 11 = VIII 12 = IX 13 = X

**19. DISEASE REACTION:** (Enter 0 = Not Tested; 1 = Susceptible; 2 = Resistant)

BACTERIAL DISEASES:

★ [2] Bacterial Pustule *(Xanthomonas phaseoli* var. *sojensis)*

★ [2] Bacterial Blight *(Pseudomonas glycinea)*

★ [2] Wildfire *(Pseudomonas tabaci)*

FUNGAL DISEASES:

★ [0] Brown Spot *(Septoria glycines)*

Frogeye Leaf Spot *(Cercospora sojina)*

★ [0] Race 1 [0] Race 2 [0] Race 3 [0] Race 4 [2] Race 5 [ ] Other *(Specify)*

[2] Target Spot *(Corynespora cassiicola)*

[2] Downy Mildew *(Peronospora trifoliorum* var. *manshurica)*

[0] Powdery Mildew *(Microsphaera diffusa)*

★ [0] Brown Stem Rot *(Cephalosporium gregatum)*

[2] Stem Canker *(Diaporthe phaseolorum* var. *caulivora)*

9300066

19. DISEASE REACTION: (Enter 0 = Not Tested; 1 = Susceptible; 2 = Resistant) (Continued)

FUNGAL DISEASES: (Continued)

★ [0] Pod and Stem Blight *(Diaporthe phaseolorum* var; *sojae)*

[0] Purple Seed Stain *(Cercospora kikuchii)*

[0] Rhizoctonia Root Rot *(Rhizoctonia solani)*

Phytophthora Rot *(Phytophthora megasperma* var. *sojae)*

★ [1] Race 1 [1] Race 2 [1] Race 3 [1] Race 4 [1] Race 5 [1] Race 6 [1] Race 7

[1] Race 8 [1] Race 9 [ ] Other *(Specify)* _____

VIRAL DISEASES:

[1] Bud Blight (Tobacco Ringspot Virus)

[0] Yellow Mosaic (Bean Yellow Mosaic Virus)

★ [0] Cowpea Mosaic (Cowpea Chlorotic Virus)

[1] Pod Mottle (Bean Pod Mottle Virus)

★ [1] Seed Mottle (Soybean Mosaic Virus)

NEMATODE DISEASES:

Soybean Cyst Nematode *(Heterodera glycines)*

★ [0] Race 1 [0] Race 2 [2] Race 3 [1] Race 4 [ ] Other *(Specify)* _____

[1] Lance Nematode *(Hoplolaimus Colombus)*

★ [2] Southern Root Knot Nematode *(Meloidogyne incognita)*

★ [0] Northern Root Knot Nematode *(Meloidogyne Hapla)*

[0] Peanut Root Knot Nematode *(Meloidogyne arenaria)*

[0] Reniform Nematode *(Rotylenchulus reniformis)*

[ ] OTHER DISEASE NOT ON FORM *(Specify)*: _____

20. PHYSIOLOGICAL RESPONSES: (Enter 0 = Not Tested; 1 = Susceptible; 2 = Resistant)

★ [0] Iron Chlorosis on Calcareous Soil

[ ] Other *(Specify)* _____

21. INSECT REACTION: (Enter 0 = Not Tested; 1 = Susceptible; 2 = Resistant)

[0] Mexican Bean Beetle *(Epilachna varivestis)*

[2] Potato Leaf Hopper *(Empoasca fabae)*

[ ] Other *(Specify)* _____

22. INDICATE WHICH VARIETY MOST CLOSELY RESEMBLES THAT SUBMITTED.

| CHARACTER | NAME OF VARIETY | CHARACTER | NAME OF VARIETY |
|---|---|---|---|
| Plant Shape | H5164 | Seed Coat Luster | 9593 |
| Leaf Shape | 9593 | Seed Size | 9593 |
| Leaf Color | 9593 | Seed Shape | 9593 |
| Leaf Size | 9593 | Seedling Pigmentation | 9593 |
| | | | |

23. GIVE DATA FOR SUBMITTED AND SIMILAR STANDARD VARIETY: Paired Comparison Data

| VARIETY | NO. OF DAYS MATURITY | PLANT LODGING SCORE | CM PLANT HEIGHT | LEAFLET SIZE | | SEED CONTENT | | SEED SIZE G/100 SEEDS | NO. SEEDS/ POD |
|---|---|---|---|---|---|---|---|---|---|
| | | | | CM Width | CM Length | % Protein | % Oil | | |
| 9584 Submitted | 133.3 | 6.3 | 84 | | | 41.8 | 21.7 | 14.2 | |
| 9593 Name of Similar Variety | 134.2 | 6.0 | 94 | | | 41.8 | 21.8 | 13.3 | |

PUBLICATIONS USEFUL AS REFERENCE AIDS FOR COMPLETING THIS FORM:


1. Caldwell, B.E., ed. 1973. Soybeans: Improvement, Production, and Uses. Amer. Soc. Agron. Monograph No. 16.
2. Buttery, B.R. and R.I. Buzzell. 1968. Peroxidase activity in seeds of soybean varieties. Crop Sci., 8: 722-725.
3. Hymowitz, T. 1973. Electrophoretic analysis of SBTI-$A_2$ in the USDA soybean germplasm collection. Crop Sci., 13: 420-421.
4. Payne, R.C. and L.F. Morris. 1976. Differentiation of soybean cultivars by seedling pigmentation patterns. J. Seed Technol. 1: 1-19.

REPRODUCE LOCALLY. *Include form number and date on all reproductions.*

FORM APPROVED - OMB NO. 0581-0055

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE

# EXHIBIT E
# STATEMENT OF THE BASIS OF OWNERSHIP

*The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a) and the Paperwork Reduction Act (PRA) of 1995.*

*Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).*

1. NAME OF APPLICANT(S)

Pioneer Hi-Bred International, Inc.

2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER

3. VARIETY NAME

9584

4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code, and Country)

7300 NW 62nd Avenue
PO Box 1004
Johnston, IA 50131-1004

5. TELEPHONE (Include area code)

515/270-3582

6. FAX (Include area code)

515/253-2288

7. PVPO NUMBER

8. Does the applicant own all rights to the variety? *Mark an "X" in appropriate block.* If no, please explain. [X] YES [ ] NO

9. Is the applicant *(individual or company)* a U.S. national or U.S. based company? [X] YES [ ] NO
If no, give name of country _____

10. Is the applicant the original owner? [X] YES [ ] NO *If no, please answer the following:*

a. If original rights to variety were owned by individual(s), is (are) the original owner(s) a U.S. national(s)?
[ ] YES [ ] NO *If no, give name of country* _____

b. If original rights to variety were owned by a company, is the original owner(s) a U.S. based company?
[ ] YES [ ] NO *If no, give name of country* _____

11. Additional explanation on ownership *(If needed, use reverse for extra space):*

## PLEASE NOTE:

Plant variety protection can be afforded only to owners (not licensees) who meet one of the following criteria:

1. If the rights to the variety are owned by the original breeder, that person must be a U.S. national, national of a UPOV member country, or national of a country which affords similar protection to nationals of the U.S. for the same genus and species.

2. If the rights to the variety are owned by the company which employed the original breeder(s), the company must be U.S. based, owned by nationals of a UPOV member country, or owned by nationals of a country which affords similar protection to nationals of the U.S. for the same genus and species.

3. If the applicant is an owner who is not the original owner, both the original owner and the applicant must meet one of the above criteria.

The original breeder/owner may be the individual or company who directed final breeding. See Section 41(a)(2) of the Plant Variety Protection Act for definition.

*According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0581-0055. The time required to complete this information collection is estimated to average 10 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.*

*The U.S. Department of Agriculture (USDA) prohibits discrimination in its programs on the basis of race, color, national origin, sex, religion, age, disability, political beliefs, and marital or familial status. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (braille, large print, audiotape, etc.) should contact the USDA Office of Communications at (202) 720-5881 (voice) or (202) 720-7808 (TDD).*
*To file a complaint, write the Secretary of Agriculture, U.S. Department of Agriculture, Washington, D.C. 20250, or call 1-800-245-6340 (voice) or (202) 720-1127 (TDD). USDA is an equal employment opportunity employer.*

STD-470-E (02-97) *(Destroy previous editions)*